ABSTRACT:

Please delete the prior version of the Abstract of the Disclosure and replace it with the following new Abstract of the Disclosure:

An analytical shell-model producing apparatus for converting a three-dimensional model into internal surfaces, wherein an internal surface is used to represent each three-dimensional element of the three-dimensional model. Each internal surface comprises a bounded plane and an associated width attribute, wherein the bounded plane is located internal to the three-dimensional element which it represents, and wherein the associated width attribute represents the width of the three-dimensional element in a direction normal to the bounded plane.